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The Impact of Free Health Screenings at Community Pharmacies on Diabetes

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STATEMENT OF THE PROBLEM

Background

Health screenings can be very important and beneficial to individuals to detect diseases early on so they can be treated more easily.[1] These screenings can be performed at community pharmacies, which is convenient because an appointment is not needed and these locations are easily accessible to patients.[2] Currently, an estimated 7 million Americans may be undiagnosed with diabetes, making it one of the most significant health issues faced today. Without treatment, the disease could become worse and also lead to other more serious health issues.[3] Having health screenings in community pharmacies could be valuable in detecting diabetes in order to be referred for diagnosis and treatment. Previous studies related to health screenings have focused on hypertension and cholesterol, and few have been conducted on diabetes alone. There has not been extensive research performed regarding patient knowledge of diabetes or on the impact of health screenings in general. Due to this lack of research and the prevalence of diabetes, it is essential to explore the impact of free health screenings in regards to this growing healthcare issue.

Significance of the Problem

- Approximately 26 million people (8.3% of the population) just in the United States are affected by diabetes
- Diabetes contributed to 231,404 deaths in just 2007 alone
- Diabetes can lead to heart disease, stroke, kidney failure, and neuropathy[4]

OBJECTIVES

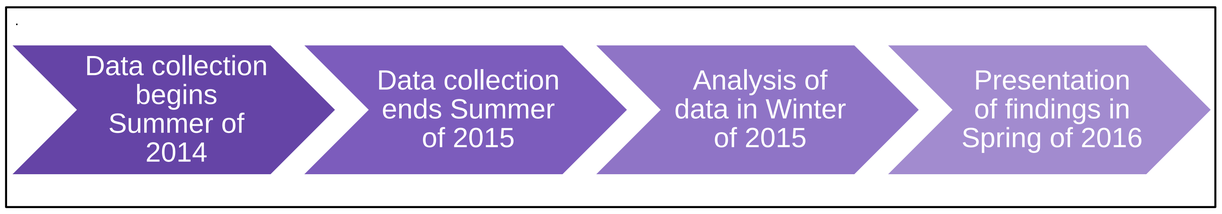
To assess the impact of free health screenings in community pharmacies on patient follow-up, perceptions, and knowledge of diabetes through blood glucose screenings and patient education.

HYPOTHESES

H_0: Blood glucose screenings and patient education on diabetes do not affect patient follow-up, increase patient knowledge of diabetes, or improve patient perceptions of health screenings.

H_A: Blood glucose screenings and patient education on diabetes affect patient follow-up, increase patient knowledge of diabetes, and improve patient perceptions of health screenings.

PROJECT TIMELINE



LIMITATIONS

- No reliable way of making sure patients have not been previously diagnosed with diabetes
- Testing was only done at local community pharmacies

PROPOSED METHODS

Study Design

- Pretest and post-tests will be given at baseline regarding patient perceptions on health screenings and diabetes knowledge
- Pretests will be given at baseline before blood glucose testing and diabetes education
- Post-tests will be given a month after blood glucose testing and diabetes education
- Patients will be called a month after the pretest regarding referral and potential diabetes diagnosis

Sample

- Purposive sampling at local Kroger pharmacies
- Inclusion criteria
  - Ages 18 and above
  - Patients not previously diagnosed with diabetes
  - Patients not recently tested for diabetes
- Exclusion criteria
  - Patients with learning disabilities that would hinder pre- and post-survey knowledge assessments
  - Patients on any medications that could cause hyperglycemia

Data Collection

- Data will be recorded by hand on a patient record sheet
- Surveys will be administered on paper

Measurement

- Surveys will measure patient perceptions on health screenings and patient knowledge of diabetes
- Patient record sheets will measure referrals
- Phone calls will measure patient compliance to referrals and number of patients diagnosed with diabetes

PROPOSED ANALAYSES

Quantitative

- SPSS software
- Comparing pre-survey and post-survey patient perceptions using Wilcoxon signed rank test
- Comparing pre-survey and post-survey patient diabetes knowledge using paired t-test
- Descriptive statistics on number and percent of people referred that do and do not see their physician and that are diagnosed with diabetes
- Comparing groups of diagnosed to undiagnosed patients using chi-square test

FUTURE DIRECTIONS

Future studies using a broader range of community pharmacies is recommended.

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